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# Transportation



Transportation data were gathered from a variety of public agencies. The Transportation and Parking Services Division of the Minneapolis Public Works Department provided information on travel trends, traffic accidents, street lighting, managing the city's parking infrastructure and use supply, and bicycle facilities. Public Works' Engineering Services Division furnished information on roadway jurisdictions and mileage, residential paving and storm drain separation programs, and bridge conditions. Public Works' Field Services Division provided information on residential pavement condition and the city's preventative maintenance programs. Minneapolis Parks and Recreation Board staff provided information on the condition of the city's parkways. The Downtown Minneapolis Transportation Management Organization provided information on travel demand management efforts in downtown Minneapolis. Metro Transit Operations Division provided information related to public bus transit service and ridership in Minneapolis.

This chapter can also be found on the city's web site at: *www.ci.minneapolis.mn.us/planning*

# The Changing Transportation Picture

**As the region's population and physical area has grown, so have the nature of trips made, whether to get to and from work, school, shopping or other entertainment destinations. Concentrated job growth has continued in certain centers, dominated by Downtown Minneapolis with 140,000 employees, and the majority of new residential development is built at the distant edges of the metropolitan area. Coinciding with an increase in the number of working people per household as well as an increase in income levels, the region has seen an increase in the number of automobiles on the road. Along with these changes have come increased congestion and longer, more unpredictable travel times as the distances between homes, shopping and workplaces grows while the region expands its own boundaries. At a more local scale, use of bicycling trails and lockers has increased, and transit improvements to the existing bus system tell us that ridership has increased in 1998 at a rate not seen since the 1970s. Clearly the region and the city need to build alternatives to provide a better choice to the private automobile.**

### Job and Population Growth

The region's population grew by 400,000 people between 1970 and 1990, from 1.9 to 2.3 million. In the same time period, the number of people working increased from 850,000 to 1.3 million, an increase of 450,000 jobs. Consequently, the number of jobs increased faster than the area population. More importantly, almost half a million more people made twice-daily job related trips in 1990 than in 1970.

### Travel Patterns in the Region

Between 1950 and 1990 the number of daily trips per person doubled: from 1.8 to 3.9 trips. Between 1970 and 1990 the rate rose from 2.7 to 3.9 trips per person. These calculations include adults and children, those who drive and those who do not. According to the 1990 Travel Behavior Inventory published by Metropolitan Council, the average trip length increased from 5.1 miles in 1970 to 6.6 miles in 1990. A new Travel Behavior Inventory, commissioned by Metropolitan Council and MnDOT, will be conducted in 2001-2002, which will soon provide updated data on travel patterns in the region.

### Cars on the Road

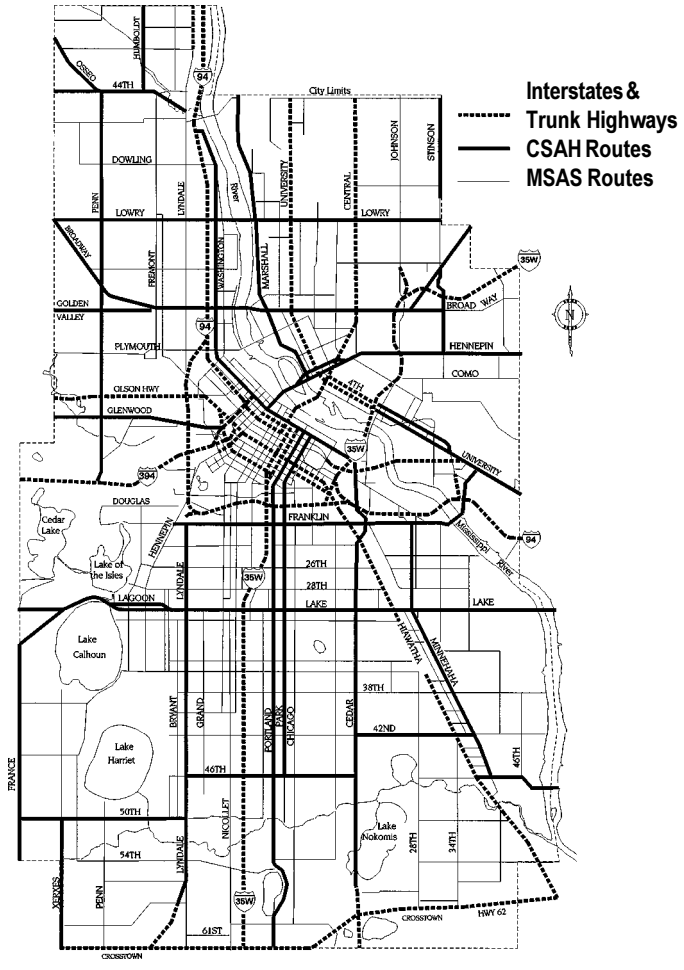
Auto ownership doubled between 1950 and 1990. In 1950 the average household owned only one vehicle. By 1990 the average household owned two cars. The number of vehicles operating on the region's roadways increased from 640,000 to 2.27 million between 1950 and 1990, an increase of 1.6 million vehicles. Between 1970 and 1990, the number of vehicles on the region's roads increased from 1.21 to 2.27 million, an increase of nearly 1.1 million vehicles. For every person added to the region's population between 1970 and 1990, the region added nearly three vehicles! As a result, the miles of congested freeway have grown from 24 in 1972 to 110 today and are expected to increase to 175 by 2010.

Fewer people are riding in each car today than thirty years ago. The average auto occupancy for all types of trips decreased from 1.5 in 1970 to 1.3 in 1990. For the work trip (the trip that puts the greatest number of cars on the road at a single time, the so-called "rush hours"), the average auto occupancy dropped from just 1.2 to less than 1.1. This means that the average person going to work in a car is driving alone.

### Specific Changes in Minneapolis

The city has also experienced changes in the way people travel over the course of a typical day. Many of those changes parallel changes at the regional level. In ten years between 1980 and 1990, the city lost 2,500 people but added about 14,000 autos according to recent Planning Department estimates. Most people who are employed at a location in the city (a work force of about 280,000 people) drive to work (about 60 percent), about 10 percent carpool and close to 16 percent use existing public transit. For the majority of people employed in the city, the average commute time is 15-30 minutes. However, many Minneapolis residents do not work at locations in the city: data tells us that close to 60 percent of city residents commute to jobs outside of the city, using the regional road network as well as city streets to do so.

**CITY OF MINNEAPOLIS:**
**STATE-AID ROUTE DESIGNATIONS**



# Roadway Infrastructure

**Roadways in the city are not all owned and maintained by the city. The federal, state and county governments are partners with the City of Minneapolis in providing a properly functioning, well-maintained network of roadways to address the travel demands of the public. Our city streets move people and goods by a variety of different vehicles and transportation modes, serving demands for mobility and providing access to property. However, some roadways designed in the 1950s are inadequate for the travel demands of the 1990s, both in their capacity and design configuration.**

**Freeway Use and Its Impact on City Streets: Current Conditions**
Much of the freeway network in the city has physically deteriorated to the point where major renovation is needed, or pavement and bridge deck replacement are necessary. Some freeway sections are handling higher-than-planned-for traffic volumes and have become unsafe. Some parts of the freeway network are aging and require replacement to avoid becoming threats to the traveling public. Much of the freeway network in the city was planned in the late 1950s and built in the 1960s and 1970s; I-94 North was completed in the 1980s. Most older stretches of freeway have reached (and exceeded) their original design capacities.

Population growth, increases in trips per person per day and total vehicle miles traveled have resulted in highway crowding throughout the region. Under these conditions, the margin for driver error has diminished dangerously, especially during high volume traffic periods like rush hour. The frequency of multi-vehicle accidents is increasing. Freeway congestion also causes traffic "spill-overs" onto the city's arterial and collector streets, a circumstance that these streets were never intended to handle. Thus, congestion slowdowns on the freeway network are indirectly contributing to congestion on the city's street system.

**Roadway Jurisdictions**
The city works with partners at the federal, state and county level to maintain its streets and roadways. These partners provide major funding for rebuilding and redesigning the streets and for this reason set standards for new construction or renovation. On the accompanying map, wide solid lines represent interstate highways. Other state trunk highways are shown in narrower solid lines; county state-aid highways (CSAH) are shown in dot and dash lines and municipal state aid (MSA) are shown as dashed lines on the map. All other streets are local city streets and under the city's control. Altogether, the city contains about 1,080 miles of roadways, 55 miles of parkways and 455 miles of alleys. See City of Minneapolis Roadway Jurisdictions map. The accompanying table shows the number of miles in each category of roadway.

**TOTAL CENTERLINE MILES OF ROADWAY IN MINNEAPOLIS BY JURISDICTION, 1998**

| Type of Roadway | | Number of Miles |
|---|---|---|
| State Trunk Highways | | 54.0 |
| Interstate Highways | | 22.9 |
| I-35W | (10.2) | |
| I-94 | (8.4) | |
| I-394 | (4.3) | |
| Other State Trunk Highways | | 31.1 |
| County-State-Aid Highways | | 87.1 |
| Municipal-State Aid Streets | | 187.6 |
| Parkways and Special Park Roadways | | 55.0 |
| Local Streets | | 721.0 |
| Alleys (Center Line Miles) | | 455.0 |
| **Total** (Center Line Miles) | | **1,104.7** |

Source: Minneapolis Public Works Department, Engineering Services Division

**City Street Maintenance Activities and Responsibilities**
The nature of county and city participation in street design and construction is markedly different. Generally speaking, the county, with the assistance of state funds, has assumed responsibility over the maintenance and reconstruction of the principal part of the roadway, the (automobile) travel lanes. The city's share has generally been to maintain and reconstruct as necessary the parking lanes, bicycle lanes, sidewalks, curbs and gutters along these streets. Over the past ten years, the state has turned back a number of trunk highways in the city, so that the city assumes costs associated with repairing these roads. The city has had to pick up the capital and maintenance responsibility for such former trunk highways as Lake Street, Cedar Avenue, West Broadway and Broadway Street Northeast, Lyndale Avenue North, and most of Washington Avenue North without significant compensation from the state trunk highway fund.

A sequence of route exchanges took effect in January of 1994. The state has exchanged ownership and maintenance responsibilities for certain roadways with Hennepin County, but no exchanges with the City of Minneapolis have occurred in this round. Hennepin County has agreed to transfer ownership of 25.5 miles (87.3 lane-miles) of county-owned roads to the city and to accept ownership and maintenance responsibility for 21.4 miles (87.9 lane-miles) of city-owned roads from Minneapolis. The most recent changes to these arrangements, effective at the end of 1997, have shifted maintenance responsibilities for all county roads outside of downtown back to Hennepin County. The City of Minneapolis is only responsible for maintaining the condition of county roads within downtown.

**Residential and Municipal State Aid Paving Program**
There are approximately 1016 miles of residential and arterial streets within the City of Minneapolis and another 23 miles of freeways and 55 miles of parkways

in addition to 1,900 miles of sidewalks. The Department of Public Works, Paving Construction division is responsible for major rehabilitation or reconstruction of those surface streets and sidewalks. Having recently completed a paving program devoted to the removal, grading and new construction of more than 600 miles of residential streets, the city has developed a renovation program that focuses on reconstruction and maintenance activities so that the surface streets maintain a useful life for a total life expectancy of 60 years.

**Roadways in the Regional Park System**

The Minneapolis Park & Recreation Board system includes a 55-mile parkway system known as the Grand Rounds Scenic Byways. In 1998, the United States Federal Highway Commission designated the Grand Rounds parkways as the nation's first totally-urban Scenic Byway. While the parkways serve as the principal means of moving around a large part of the city's park system, they are also important elements of the city's transportation network. The parkways are clearly different from other city streets, with special demands on the parkways from a number of different users. Issues of speeding automobiles, pedestrian and bicyclist use, landscaping and aesthetic features are critical for parkway users and neighboring property owners.

In 2000, the maintenance and upkeep of the parkway system became the responsibility of the Public Works Department, while the Minneapolis Park & Recreation Board retained authority for parkway layout, landscaping and routing decisions.

The Minneapolis Park & Recreation Board has installed several test applications of the traffic calming measures recommended in the 1998 Parkway Traffic Study on selected locations within the parkway system. These tests are intended to determine the efficacy of potential approaches to the problem of excessive traffic, speed and volume throughout the parkway system. Installations were made on King's Highway, Dean Parkway and on a portion of West River Parkway. Traffic calming will also be an important component of the reconstruction of East River Parkway adjacent to the University of Minnesota and will be implemented in 2001.

**2000 PARKWAY STREET IMPROVEMENTS, MINNEAPOLIS PARK & RECREATION BOARD**

Mill and Pavement Reconstruction:
- St. Anthony Parkway, Central Avenue to Stinson Blvd.
- Minnehaha Parkway, 35W to Cedar Avenue

Pavement Seal Coat:
- West Calhoun Parkway, Richfield Road north to Lake Street

Parkway Bridge Replacements (in partnership with the City of Minneapolis, and the BNSF Railroad):
- Cedar Lake Parkway Bridge
- Plymouth Avenue Bridge.

**PAVING PROGRAM 2000-2001**

| 2000 | Miles | Estimated Cost |
|---|---|---|
| Stevens Square | 7.20 | $ 4,470,000 |
| Johnson Street N.E. | 0.37 | 827,000 |
| 11th Avenue South | 0.06 | 250,000 |
| 5th Avenue South | 0.06 | 389,000 |
| 4th Street South | 0.06 | 200,000 |
| Franklin Avenue | 0.50 | 2,552,000 |
| Como Avenue SE | 0.21 | 252,000 |
| 31st and California | 0.12 | 637,000 |
| Main Street SE | 0.21 | 2,922,000 |
| Hennepin Ave. | 1.29 | 3,120,000 |
| Nicollet Avenue | 0.40 | 1,442,000 |
| Harrison Renovation | 4.30 | 1,324,000 |
| Harrison Street NE | 0.30 | 447,000 |
| Fulton Street SE | 0.30 | 108,000 |
| Parkway Paving | | 1,500,000 |
| Sidewalk | | 1,200,000 |
| **Total** | **15.28** | **$21,640,000** |

| 2001 | Miles | Estimated Cost |
|---|---|---|
| Ewing Avenue South | 0.40 | $ 722,000 |
| Dowling Avenue South | 1.70 | 1,050,000 |
| Como North Renovation | 4.00 | 1,277,000 |
| North Phillips Renovation | 5.30 | 1,698,000 |
| University Renovation | 4.50 | 1,428,000 |
| 29th Street West | 0.13 | 252,000 |
| 2nd Street Commercial | 0.48 | 573,000 |
| 3rd Avenue South | 1.00 | 2,126,000 |
| Convention Center | 0.20 | 1,000,000 |
| Chicago Avenue | 0.38 | 3,914,000 |
| Parkway Paving | | 1,500,000 |
| Sidewalk | | 1,200,000 |
| **Total** | **18.09** | **$16,740,000** |

**Street Renovation Program**

Public Works has developed a framework to set the priorities of a street renovation program, relative to the age and condition of the streets and the kinds of rehabilitation work the streets have experienced in the past. Analysis of the data shows that a large percentage of the residential network is approaching that point in the pavement life cycle where more frequent seal coating and more extensive maintenance or rehabilitation efforts, such as mill-and-overlay treatment, and miscellaneous curb and gutter replacement, will be required to maintain asphalt paved streets in good, serviceable condition. This higher level of maintenance is more costly than routine seal coating and is an inevitable condition of older more established urban areas. The object of the program is to extend the residential pavement system through another life cycle.

While the residential street system is in relatively good condition for its age, due in part to the current seal coat program, the Municipal State Aid Streets are not in as good condition. Public Works determined that a number of these mainline city-owned streets should be milled and overlaid to reduce the backlog of streets in need. The concrete streets in the residential system

have maintenance problems that also need increasing attention as they grow older. Correcting of these problems includes extensive joint repair and some wholesale panel replacement, which may also require subgrade soil correction.

**Alley Resurfacing Program**

The alley system in the City of Minneapolis is even older than the roadway system. The prevalence of alleys throughout city neighborhoods, and the access they provide to housing, makes them an important part of the street network in city neighborhoods. The funding source to resurface the city's 455 miles of alleys was dropped in 1992 for budgetary reasons.

**Traffic Calming**

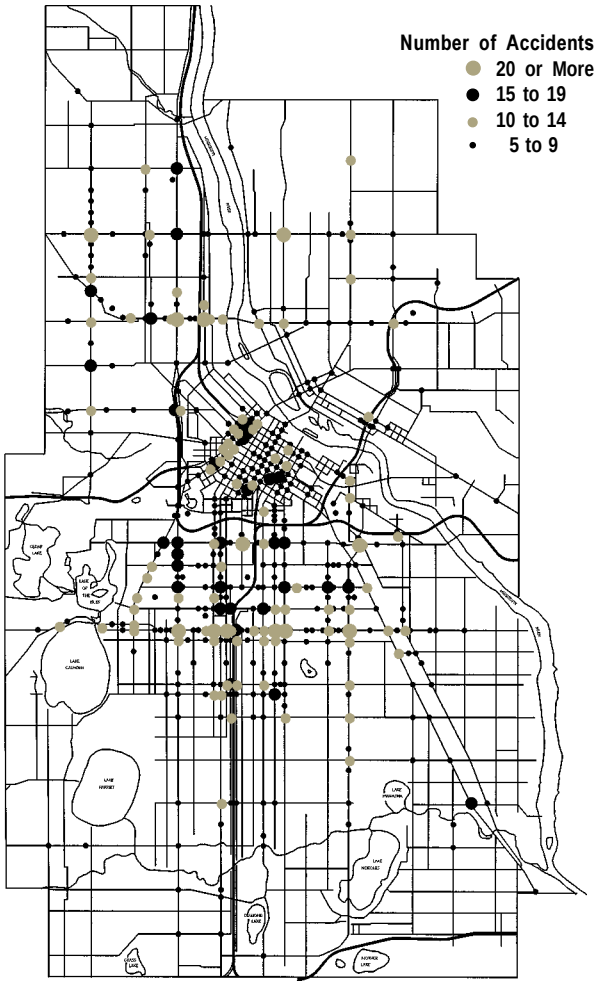
The City of Minneapolis, through its Department of Public Works, Transportation Division, continues to expand its efforts to reduce the impact of traffic in residential neighborhoods. These "traffic calming" measures take many forms, but the most common changes to city streets are the construction of speed humps, alley humps, lane reduction measures, and intersection chokers (which make the intersection narrower). These are all useful measures because they reduce the comfort level of high speed driving. However, they can be quite controversial because of driver unfamiliarity and reluctance to trade off accessibility and local convenience in exchange for reduced travel speeds. Therefore, whenever possible, traffic calming measures are installed on a temporary test basis to determine neighborhood acceptance prior to implementing a permanent measure. Results so far are mixed and will probably be effective on a location-by-location basis. Additional "traffic calming" types and variations are under review. The Transportation Division is in the process of developing a policy regarding traffic calming.

**Traffic Accidents**

Reducing accidents and injuries on city streets is an important part of maintaining the high quality of life in the city, as well as the integrity of the roadway structure. The total number of accidents in 1999 decreased to below 1996 levels. The number of fatalities resulting from accidents decreased by 60% compared to previous years, Furthermore, accidents involving injuries also dropped to the lowest level since 1994.

For the second year in a row, bicycle accidents decreased, reversing a trend that had been rising over the past decade. The decrease in accidents in 1998 and 1999 is a positive development, given that the city is experiencing a substantial increase in bicycle volumes due to improved bicycle parking and lane/trail facilities. It is interesting that the numbers of accidents on weekdays (Monday through Friday) are essentially equal, but drop off significantly on weekends. Although high accident corridors are more difficult to determine because of the relatively small numbers involved, five-year totals indicate that the high accident locations fall on the major city streets. This pattern would lend itself to a Top Accident Control Target (TACT)-type accident reduction program now used for motorized vehicles. An enforcement effort is continuing in the Uptown area and along the Nicollet Mall.

**1999 TRAFFIC ACCIDENTS**




**TRAFFIC ACCIDENTS, BY TYPE**
**1994-1999**

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|
| Total Accidents | 6,829 | 7,656 | 8,088 | 8031 | 7,590 | 7,707 |
| Injuries | 4,131 | 4,587 | 4,623 | 4314 | 4,291 | 4,051 |
| Fatalities | 20 | 12 | 10 | 17 | 17 | 10 |
| Pedestrian Accidents | 395 | 459 | 394 | 407 | 383 | 383 |
| Pedestrian Fatalities | 7 | 3 | 2 | 6 | 10 | 5 |
| Bicycle Accidents | 337 | 323 | 358 | 375 | 348 | 304 |

Source: Minneapolis Public Works Department, Transportation Division

As a result of continued and coordinated focus of the city's Police Department and Public Works Department concentrated on the city's high accident TACT, the number of traffic accidents and injuries in the TACT areas has dropped while total traffic accidents on a city-wide basis have remained basically the same. Through the TACT program, the city has been able to obtain the maximum positive accident reduction impact from limited equipment and personnel resources. The TACT program is an example of the ongoing success of the city's efforts to reduce accidents and contain city costs at the same time.

**Sidewalk Maintenance Program**

The Sidewalk Division of the Public Works Department maintains the city's 1,900 miles of sidewalks and oversees the inspection and construction of sidewalks associated with all street paving projects. This division is also responsible for permitting and inspecting concrete construction by private concrete contractors who work in the public right of way. Generally speaking, sidewalks are inspected and repaired on a seven to ten year cycle. If the property owner hires the City's contractor, the cost of repairs can be paid either by direct single payment or by special assessment to property taxes. During the 2000 construction season, over 3.5 million dollars was spent on sidewalk infrastructure City-wide. Waite Park, Armatage, Lakewood and Cooper were the focus of activity during the past construction season.

Maintaining the sidewalks as a clear and safe pathway for pedestrians in the winter is a challenge in Minneapolis, given the demands that the climate places on property owners. Yet, maintaining the walkability of the sidewalks is a key aspect of preserving a sense of livability in the winter months for all citizens. The Public Works Department has worked to meet this goal by creating a program that responds to snow and ice complaints from pedestrians. The city's Snow and Ice Ordinance requires property owners to maintain their sidewalks in all winter conditions and to make sure the sidewalk is clear after winter storms. Under the Winter Program, sidewalks are inspected and adjacent property owners are notified if their sidewalk is found to be in violation of the ordinance.

**Bridges in the City**

Minneapolis has a total of 608 bridges (excluding freeway bridges) within the city limits. Of the 608 bridge structures, 281 structures carry railroad, pedestrian, and skyway traffic over roadways. The remainder of the 327 bridge structures carries roadways over other roadways, creeks and rivers, or railroads. These bridges are a critical part of the city's transportation network.

The city owns and maintains 179 of the 608 bridges in Minneapolis, with an additional 149 bridges maintained by agreement with the bridge owner for a total of 328 bridges.

At the end of 1999, 27 bridges were structurally deficient, and 30 were functionally obsolete, for a total of 57 deficient bridges, defined as such by federal rating criteria. The cost of replacing these bridges is estimated at about $50 million in 1996 dollars. By the year 2001, about 85 more bridges built prior to 1940 will be added to the deficient list and will require an additional $70 million in 1996 dollars. At the replacement rate of four bridges per year it will take about 20-25 years to replace the deficient structures without counting additional bridges that may become deficient as they exceed their useful life of 60 years.

Since the late 1970s, the city has had an aggressive bridge replacement program, successfully acquiring federal and state participation to provide the majority of funding for bridge replacement. A five-year replacement program is refined each year by the Public Works Department and will be continued in order to keep the Minneapolis bridge network viable. The accompanying map shows the locations of the bridges owned and maintained by the city, their condition and the types of maintenance activities appropriate for the bridges' condition. The condition ratings shown on the map indicate the urgency of needed maintenance work.

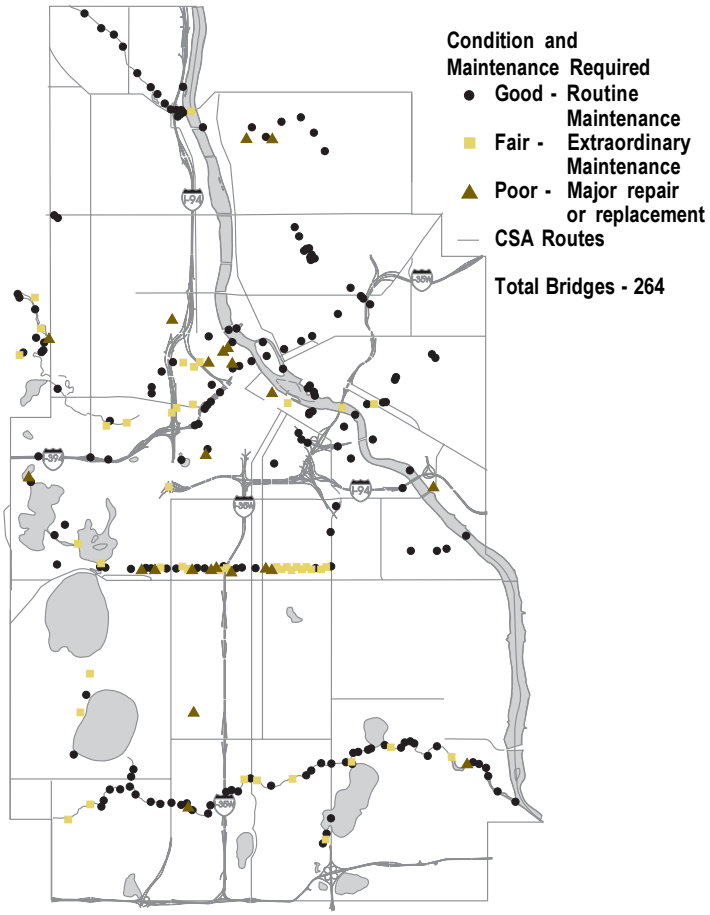
Currently, the Public Works Department performs annual structural inspections of all bridges according to strict criteria set up by the federal government. This information is used to recommend a year-by-year schedule of short-term maintenance, major repair and bridge replacement activities.

**TACT AREAS COMPARED WITH REST OF THE CITY, ACCIDENTS BY YEAR**

| | 1996 | | 1997 | | 1998 | | 1999 | |
|---|---|---|---|---|---|---|---|---|
| | Total Accidents | Injury Accidents | Total Accidents | Injury Accidents | Total Accidents | Injury Accidents | Total Accidents | Injury Accidents |
| TACT Areas | 2,054 | 917 | 1,961 | 846 | 2,018 | 882 | 1,998 | 819 |
| Rest of City | 6,034 | 2,271 | 6,070 | 2,249 | 5572 | 2104 | 5,709 | 2,089 |

Source: Minneapolis Public Works Department, Transportation Division

## CONDITION STATUS OF BRIDGES OWNED AND MAINTAINED BY THE CITY, 1996




### Pedestrian Level Lighting

Residents of the City of Minneapolis are becoming more interested in the installation of pedestrian level lighting around their neighborhoods, as concern over security and aesthetics becomes more focused on conditions on neighborhood streets after nightfall. The city's program is based on responding to resident requests or petitions to have the lighting installed, with an accompanying assessment for the light fixtures and installation. While the city does not budget for the installation of pedestrian level lighting in neighborhoods, it contributes to the costs incurred by assuming responsibility for ongoing maintenance and operation of the lighting system. In 2000, approximately 1000 pedestrian 'low level' lights were installed within this program. To date, the Public Works Department has already received successful petitions for over 800 lights for 2001.

# Parking Infrastructure

**The parking system in Minneapolis consists of a variety of parking modes, from surface lots to parking structures to metered and on-street parking. The challenge facing the city is to provide sufficient parking to automobile drivers so that the city's competitiveness and marketability are not negatively impacted. At the same time, there is an equally important need to manage supply so people are encouraged to use transit as a method of getting to their destinations quickly, conveniently and comfortably without concern for parking availability or cost.**

### Parking In Downtown

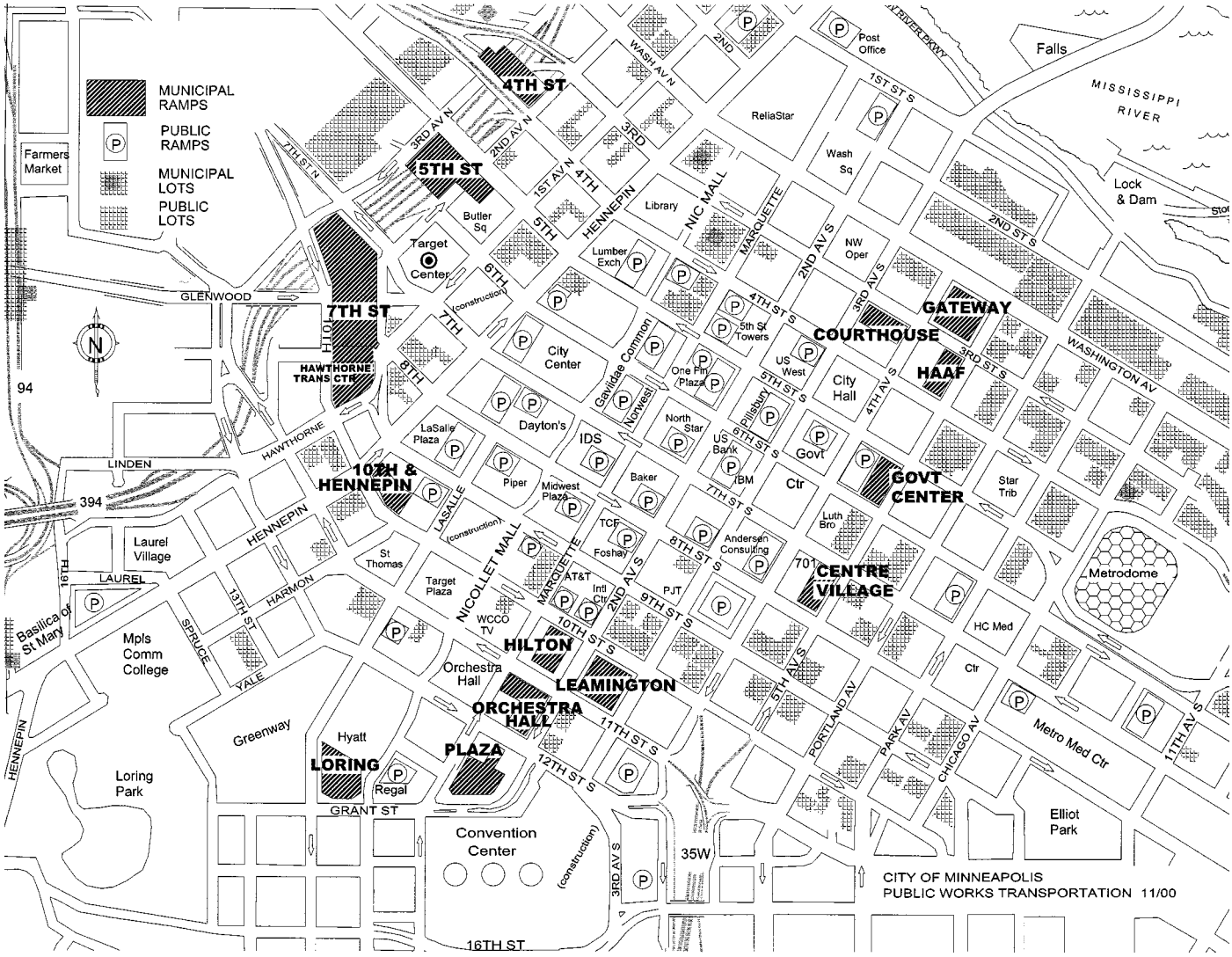
Downtown Minneapolis is the commercial and financial hub of the metropolitan region. New transit initiatives and increased passenger ridership play an increasingly important role in downtown's capacity to absorb more vehicles on a daily basis. The time and economic costs of traveling by single occupant vehicle into and out of downtown in peak hours are becoming increasingly clear as the region continues to grow and downtown's job base expands.

The City of Minneapolis, through its downtown Municipal Parking System, plays a crucial role in maintaining a balance between parking demand and supply, and, at a larger scale, between automobile and transit use into and out of downtown. The downtown ramps, nine parking lots, and 5,000 of the city's 6,000 on-street parking meters are the municipal component of the parking supply that represents about 38 percent of all available parking in downtown Minneapolis. Financing for the system has come from the city, MN/DOT and the Federal Highway Administration. The aggregate public investment in the downtown parking system is about $314,000,000 (1994 dollars).

### Downtown Parking Rates and Revenues

The city sets its downtown parking fees at market rate for two reasons: the city must cover all construction, maintenance and operating expenses from user fees; and the city's pricing policy must avoid adversely affecting the private parking market. The parking meter system is a major revenue-producer for the city's parking fund. Parking meter fees are essential to the parking fund because they offset the high cost of structured parking facilities and, in some areas of the downtown, they offset revenue gaps caused by "soft" parking markets.

## MUNICIPAL PARKING SYSTEM




The following table and chart identify the typical users of the city's downtown municipal parking system.

**AVERAGE DAILY USE OF DOWNTOWN MUNICIPALLY-OWNED PARKING SPACES[1]**

| User Type | Percent of Total | Avg. Number of Vehicles Parked |
|---|---|---|
| Hourly / Daily | 45.9 | 11,060 |
| Monthly | 24.2 | 5,830 |
| Carpool, Vanpool | 11.9 | 2,870 |
| Commercial Validation | 3.3 | 800 |
| Event Parking | 14.7 | 3,540 |
| Total | 100.0 | 24,100 |
| Total cars parked in 1999 | | 5,300,000 |

[1]The total number of off-street parking spaces in the downtown municipal system is 20,000.

Source: Public Works' Transportation Division, Planning Department calculations.

The accompanying map shows the locations of ramps and lots in the municipal parking system.

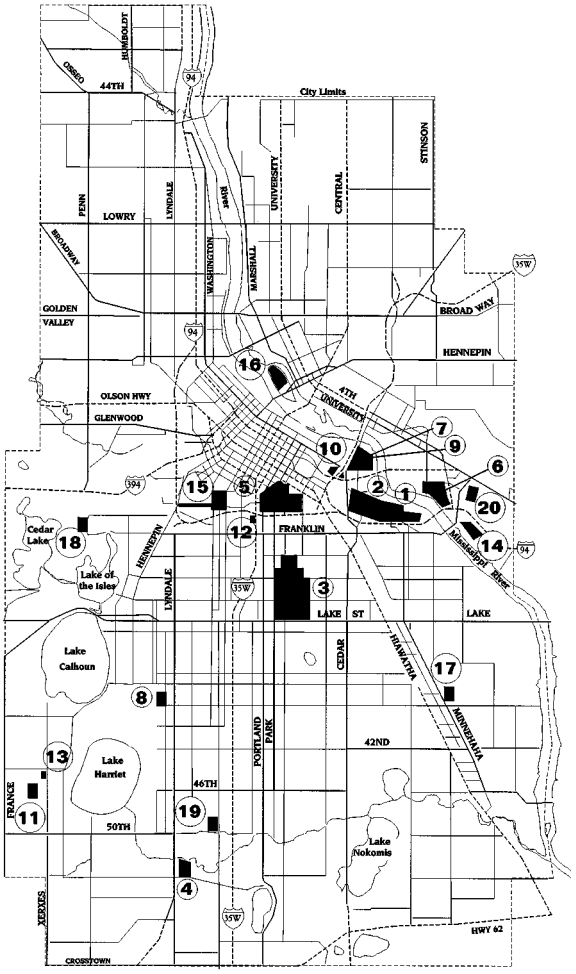
**Parking in Commercial Areas and Neighborhoods**

According to leaders in the city's community and neighborhood business areas, close-by on-street parking is critical for their businesses' continued viability. The city provides parking meters in some areas, off-street lots in others, and time-controlled on-street parking in yet other areas to help provide this needed parking. However, in a few areas of the city, the need to safely move traffic has required that some commercially oriented on-street parking be restricted, at least during peak traffic periods. In these areas, additional off-street parking should be developed to accommodate the demand.

**Critical Parking Areas**
Some activity centers in the city attract so many people that parking spills over onto surrounding residential streets. Residential areas close to these activity centers receive special consideration from the city when officially designated as Critical Parking Areas (CPAs). Residents of CPAs who must use on-street parking are able to purchase at a minimal fee, a parking permit which affords them long-term parking privileges, but eliminates or keeps at a minimum on-street parking spaces available to outside users. Special signs are used to designate CPAs. These Critical Parking Areas require additional enforcement to ensure compliance with permit requirements. The number of CPAs continues to increase as a result of an ordinance change that broadens the criteria for CPA designation.

The accompanying map shows the locations of Critical Parking Areas throughout the city.

**CRITICAL PARKING AREAS**




**2000 Downtown Minneapolis Transportation Study**
Over the course of 2000, the city undertook a comprehensive multimodal analysis of current and future transportation systems and needs in downtown Minneapolis, with the assistance of SRF Consulting Group, Westwood Professional Services and Walker Parking Consultants. The report covers a wide range of topics relevant to the downtown transportation system.

Its scope includes:
- Traffic Flow Analysis (highway and regional access, impacts from new development and other activities, signage and way-finding)
- Parking Analysis (demand and supply,on street parking, fee structure)
- Transit Analysis (Downtown Circulator routing, transit needs modeling)
- Bicycle System Assessment (routes, facilities storage)
- Pedestrian Circulation (street level and skyway level)
- Curbside Activities (loading, taxicabs, on-street parking)

The report is intended to serve as an ongoing resource for policy-makers as decisions about investment in the downtown transportation system are made. By taking a comprehensive survey of existing conditions and resources, and forecasting a few growth scenarios, the study illustrates the potential investments that should be made in downtown's transportation infrastructure. The forecasting encompasses traffic flow and intersection capacity, curbside use and loading needs, transit operations, and pedestrian/bicyclist system attributes.

Generally, the report finds that the system as a whole functions well. At the micro level, deficiencies exist and are likely to emerge as the city continues to grow. The report identifies remedies and key strategies that should be taken up in order to maintain the livability of downtown. City Council has not taken action on the study as of the end of 2000, but anticipates the report will be a significant resource to them in their ongoing discussions about transportation policy for downtown Minneapolis.

# Alternatives to the Automobile

**Minneapolis' economic competitiveness in the metropolitan region, as well as the livability of its neighborhoods, depends on a successful, high quality and balanced transportation system. As a region that has grown up with the automobile over the last four decades, the challenge that the city faces is to improve the quality and attractiveness of alternative transportation modes, whether by bus, foot or bicycle movement.**

**The Public Transit System**
Transit is integral to the city's future. Building a more balanced, high quality transit system will allow the city to pursue smart growth patterns and provide more options for travel to specific destinations such as work, education or entertainment. A good public transit system promotes the accessibility of downtown and enhances the mobility of those who ride the bus as well as those who remain in their cars.

In 1996, the City of Minneapolis convened an interdepartmental effort at drafting the city's Transit Planning and Funding Strategy. This project was a joint initiative by the Public Works Department, the City Coordinator's office, the Planning Department and the Minneapolis Community Development Agency (MCDA). The strategy recommends that the City of Minneapolis commit to three principal tasks: first, to *focus* economic growth and transit service on designated Transit Corridors and Transit Centers; second, to designate and improve a high transit *service* area by modifying existing routes to focus on Corridors and Centers as described above; and third, to implement measures and improvements that give public transit *priority* in the planning, construction and operation of its streets.

One of the city's most important partners in working toward these objectives is the regional transit agency. Metro Transit is a division of the Metropolitan Council, responsible for planning and operating the transit system in Minneapolis and throughout the metropolitan area. As the Hiawatha Light Rail project advances in planning and construction, the operations of both the bus and the transit system will continue to be the responsibility of Metro Transit.

**Bus Stops**
A federally funded project to place new bus signs at all Minneapolis bus stops is nearing completion. Many stops had no signs at all, and quite a few of the existing signs are old and deteriorated. The new signs are equipped with reflectors for better night visibility, and say "BUS" on the backside so pedestrians can more easily find the stops. Along with the signs, schedule information holders are also being installed in downtown, wherever two or more routes serve the same stop, and at transfer points, unless there is already a bus shelter at these locations. To make bus stops more secure, Metropolitan Council Transit Operations (Metro Transit) continued a program of security lighting that dramatically increases the light level around the stop. Over the course of 2000, 27 standard bus shelters were constructed within the city of Minneapolis. Special transit plazas were constructed at I-94 and Snelling Avenue in St. Paul and on the Route 94BC express to downtown Minneapolis.

**Vehicles**
In 2000 Metro Transit added 130 new buses to its fleet, including 25 small, neighborhood circulator type buses. They are currently deployed on the following routes within Minneapolis:

| | |
|---|---|
| Route 15 | 66th Street Crosstown |
| Route 32 | Lowry Crosstown |

These new buses are assisting in the diversification of Metro Transit's fleet of transit vehicles and will enable the agency to respond to a variety of needs in different areas of the city and the region.

**Exclusive Bus Lanes**
Twenty-nine miles of exclusive bus shoulder lanes were implemented in 2000 on express bus routes serving downtown Minneapolis. The locations are:

- Eastbound I-94 from Cedar Avenue in Minneapolis to John Ireland Blvd. in St. Paul
- Westbound I-94 from Western Avenue in St. Paul to Cedar Avenue in Minneapolis
- Westbound Highway 36 from I-694 in North St. Paul to Edgerton Street in Little Canada
- Eastbound Highway 36 from I-35E in Little Canada I-694 in North St. Paul
- Northbound Highway 100 from Benton Blvd. in Edina to Excelsior Blvd. in St. Louis Park
- Northbound West River Road approaching Highway169 in Champlin

For 2001, additional bus shoulder lanes will be constructed on Highway 169 between I-394 and I-494 in both directions.

**Ramp Meter Bypasses**
Ramp meter bypasses for Minneapolis express buses were opened in 2000 at:

- Highway 36 and Highway 51 in Roseville
- I-94 and 6th Street near the Metrodome in Minneapolis
- I-694 and County Road 81 in Brooklyn Park

**Other facilities**
A large (400-car) park-ride lot has been completed at Highway 610 and Noble Avenue in Brooklyn Park.

**Transit Service and Ridership**
Metro Transit ridership has increased continuously since 1997.

**OCTOBER 2000 COMPARATIVE RIDERSHIP FIGURES WITH OCTOBER 1997 AND OCTOBER 1998**

**Comparative ridership figures from October 1997:**

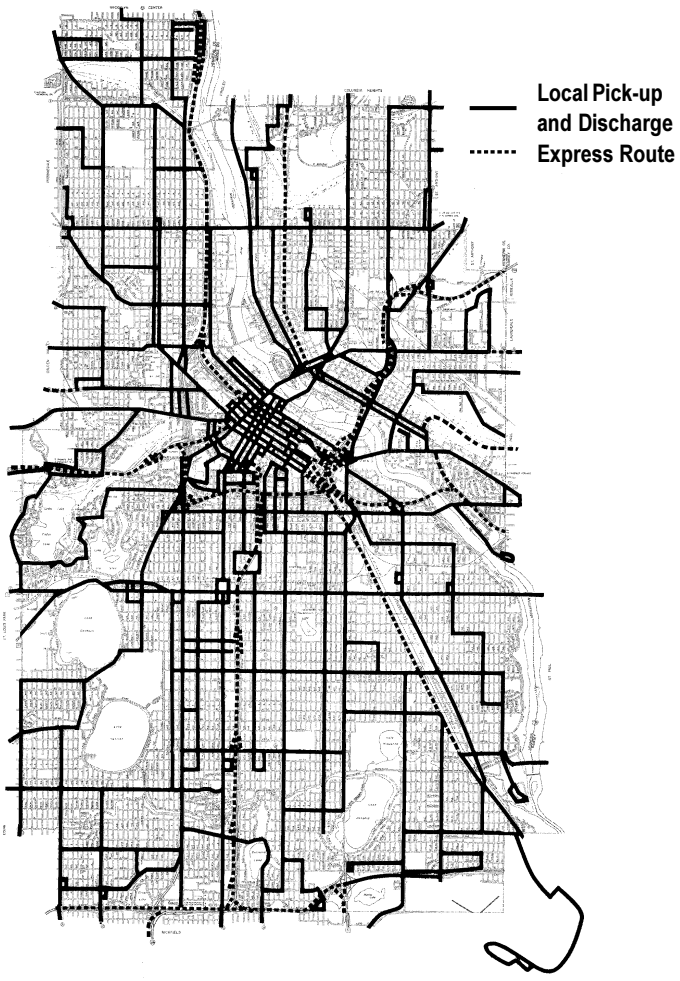
| | 1997 Ridership | % Change since 1997 |
|---|---|---|
| Average weekday ridership | 210,000 | + 19.04 |
| Average Saturday | 108,000 | + 16.43 |
| Average Sunday | 60,000 | + 33.95 |

**Comparative ridership figures from October 1998:**

| | 1998 Ridership | % Change since 1998 |
|---|---|---|
| Average weekday ridership | 232,000 | + 7.54 |
| Average Saturday | 123,000 | + 2.71 |
| Average Sunday | 72,000 | +11.15 |

Regular-route ridership – the core of the system – was up nearly three percent to 5.9 million, as of October 2000. The growth was assisted by the first partial month use of University of Minnesota U-Passes. U-Pass rides totaled more than 155,000 in a program under which the University subsidizes a four-month all-you-can-ride pass for students for just $50.

**METRO TRANSIT SERVICE IN MINNEAPOLIS, 1997**




In addition, Metropass ridership continues to grow, reaching nearly 272,400 in October 2000. . The University also began offering Metropasses to staff and faculty in September for $35 a month. Heavy marketing of restructured northeast metro service boosted coupon rides to nearly 58,000 from 42,600 a year earlier. The marketing department sent a pair of free rides to residents near new and revised routes in an effort to stimulate trial of the new service.

Specific route and service changes affecting Minneapolis during 2000 included:

- Route 1 Kenwood was renumbered Route 25 and now reaches downtown Minneapolis via Oak Grove Street and Nicollet Mall;
- Route 10 Grand Avenue was merged into Route 18 Nicollet Avenue. The old turnaround loop at 48th and Grand was replaced by 48th and Nicollet;
- Route 27 midday service via Marshall Street NE was discontinued;
- Midday service frequency on Route 32 Lowry Crosstown was improved;
- All day non-stop express service was initiated on Route 260 between downtown and Rosedale Center; and,
- New Route 101 connects Prospect Park and the U of M with the Quarry Center in NE Minneapolis.

**Regional Transit and Transportation Systems**

Metropolitan Council's transportation planning has identified a network of transitways connecting job and population centers throughout the seven county metropolitan region, including the Hiawatha Corridor. Other important corridors and the preferred transit modes, as noted in the regions' 2020 transit Master Plan include:

- Northstar Corridor ( St Cloud to Minneapolis, preferred transit mode is commuter rail)
- Dan Patch Corridor
- Red Rock Corridor
- Central Corridor

**The Hiawatha Corridor**

Light rail transit (LRT) is a form of transportation that has proved very compatible with urban environments in cities all over the nation. It provides rapid transit service in a way that blends well with its surroundings, while delivering convenience and accessibility to existing and new transit riders. Most of the metropolitan areas that have built light rail transit in the last five to ten years have found that the service provided by light rail has provided a wide range of benefits to users.

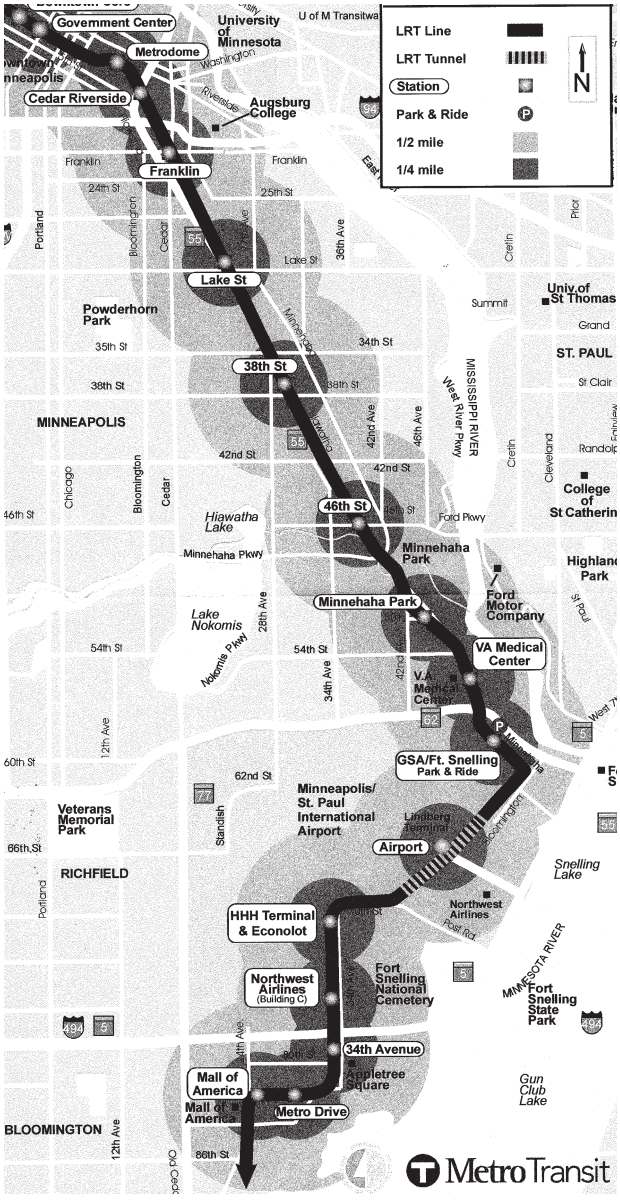
In 2000, the Hiawatha Light Rail Project observed a number of additional milestones. Station design was completed, with significant public input, in the early part of the year. A design-build contract was prepared, released, and awarded to a consortium of designers and builders calling themselves Minnesota Transit Constructors. Thanks to an additional $60 million in federal funding approved in 2000, the line will be extended in downtown to 1st Avenue N., with an additional station

between Hennepin and 1st Avenue. Construction also began on a federally funded 4th Street contraflow bus lane, to handle the buses displaced from 5th Street by LRT. The additional funding also will add more light rail vehicles to the fleet, and increase the budget for public art.

The Hiawatha Corridor line will run from downtown Minneapolis along 5th Street, with a stop between Hennepin Ave and 1st Ave, a stop between Nicollet Ave and Marquette Ave, another in front of City Hall and the Government Center, and a final downtown stop immediately to the west of the Metrodome. After leaving downtown and following the existing rail right-of-way, the trains will stop at 16th Ave in Cedar Riverside. Next will be a station stop at Franklin Ave, then Lake Street, 38th Street, 46th Street and the last city stop will be 50th Street, near Minnehaha Park. Other stops planned include the Veterans Administration campus, a stop near the General Services Administration and a park and ride lot, three stops at the airport and three in Bloomington, including the Mall of America.

Planners at Metro Transit forecast a daily ridership of 24,000, with an estimated travel time between downtown and the Mall of America at 22 minutes, and a timely 19 minute trip to the airport. The trains are expected to run every 7 1/2 to 10 minutes in the peak period, every 15 minutes in the off peak during the day and every 30 minutes in the evening, weekends and holidays. Construction of the line would start in 2001, testing of trains and control systems in late 2003 and full revenue service would be initiated through 2004. One of the most important supporting functions related to the light rail service is the potential redesign of bus routes to better serve neighborhoods, both as feeders into the LRT line and as methods of connecting neighborhoods. Fundamental to the success of the rail line is good feeder bus service. Bus hubs will be located at Fort Snelling, Veterans Hospital, 46th Street and 38th Street stations. Existing buses will be rerouted to serve the stations, and bus frequencies will increase to better match the LRT. The cost for a transit patron to use the LRT will be the same as the bus system with transfers treated the same way they are today. The buses will also be timed to make transfers with each other, thus improving neighborhood to neighborhood transit as a byproduct.

No park and ride facilities have been planned around the stations located in the Minneapolis portion of the Hiawatha Light Rail line. The city will rely on best practices within Minneapolis (such as controlled on-street parking) as well as those of other municipalities to ensure that LRT riders do not flood neighborhoods adjacent to the line with all day, on-street parking. However, large parking facilities will be built at GSA (Highway 55 and 62) and additional spaces will be provided at the Mall of America. City staff have worked closely with staff at Metro Transit, Metropolitan Council, the Hennepin County Regional Rail Authority and the Minnesota Department of Transportation to plan for final station locations, preliminary engineering design, coordinated bus service in neighborhoods and long range plans for development. The City of Minneapolis has undertaken a Station Area Planning process that focuses on identifying goals and specific opportunity sites for future development around some of the LRT stations located in the city. This process has involved members of the general public, neighborhood organizations, multiple public agencies and consultant teams in a series of planning exercises designed to inform, provide options and ultimately recommend action for the sites that are likely to be most influenced by the benefits associated with proximity to an LRT station. An interim ordinance prohibiting auto-related uses within the immediate vicinity of the station areas and otherwise regulating the nature of commercial and industrial development was introduced in late 1998 to allow these studies to take place. Recommendations for change to land use regulations are expected to be heard before City Council in the first quarter of 2001.



**The Downtown Transportation Management Organization**

The mission of the Downtown Transportation Management Organization (TMO) is to promote congestion mitigation strategies and advocate for environmentally sound transportation policies to assure the continued growth and prosperity of downtown Minneapolis.

In order to fulfill the organization's mission, TMO activities include:

- Providing an information and sales outlet for commuters and the general public at a resource center, Commuter Connection (located in the Pillsbury Center); Commuter Connection is a state-of-the-art transportation service center offering the most current information;
- Teaching the public about alternatives to driving alone including the transit system, car-vanpooling, bicycling, telecommuting and flexible work arrangements;
- Involving employers and building managers in making good business decisions that support community options for employees, tenants, and employers; in 2000 the TMO, through an employer outreach program, worked with 60 businesses representing over 20,000 downtown employees;
- Advising government agencies and the private sector on transportation issues; the TMO serves as an advisory body to the Minneapolis City Council and the Minneapolis Downtown Council;
- Promoting effective improvements to current alternative forms of transportation; the TMO supported legislation to provide a dedicated transit-funding source, establish transitways and light rail transit (LRT) service, and provide a state tax credit to employers providing transit benefits to their employees; and,
- Educating business leaders, key policy makers and employers through a multimedia presentation on congestion's impact on our workplaces, urban center and region.

The TMO is a transportation information resource for downtown commuters and employers and is continually developing measures to reach a broader commuter audience. The TMO's efforts are bringing more people downtown in more economical, environmentally sound modes of transportation.

**Bicycle Commuting**

Bicycle use as a form of transportation is on the rise. From the early 1980s to the early 1990s, bicycle commuting to downtown almost doubled. Recent data has shown that this upward trend continued through 1998. The growth rates have grown steadily over time: in 1977, slightly more than 200 downtown employees commuted to work by bicycle. Ten years later, in 1987, it was shown that the number had grown to almost 400. In 1990, the counts showed that close to 750 people were commuting to work downtown on a bicycle, and by 1998, cordon count data recorded approximately 2,800 bicyclists commuting to work on an average day in the April to November months. Estimates for 2000 suggest that there are about 3,000 cyclists commuting to work between April and November, and even through the winter there are about 1,000 people bicycling in downtown.

A summer 1994 inventory of bicycle parking facilities in downtown by the Public Works Department found 476 rack and hitch spaces and 190 high security bicycle parking lockers, for a total of 666 bicycle parking spaces. This number is increasing on an annual basis as the City of Minneapolis and the private sector continues to recognize the ever-expanding number of bicycle commuter needs. The city has a program to encourage businesses to promote bicycle commuting by offering a cost sharing program to encourage businesses to provide bicycle racks and lockers for their employees' use. So far the matching program for bicycle racks has been implemented at these locations:

University of St. Thomas
Bennett Lumber
Government Center Municipal Ramp
Walker/Guthrie Area
Uptown Business – 3 locations
Various Downtown Businesses

A 1999 zoning code revision has since required all new office developments and major renovations located in downtown Minneapolis to incorporate bicycle facilities (clothing storage lockers and showers) into buildings of 500,000 square feet and larger.

**MINNEAPOLIS BIKE ROUTES, FIVE YEAR PLAN**